

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-15. (Cancelled).

16. (Currently Amended) A gas weed killing burner device, ~~type combustion device~~ ~~which projects a mix of air and gas inflamed at the outlet of a pipe, the burner~~ comprising:

a main body (100) having ~~:-~~ an upper end (110) fitted with a gas inlet ~~in the form of a~~ coupling (111) and ~~[[2)]]~~ a lower end (120) which opens out to allow an inflamed gas and air mix to escape to create a flame;

a movable diffusion cone (200) located at the lower end (120), the diffusion cone (200) having a tip (210) located at least upstream from a flame creation zone to ensure the bursting of the air and gas mix; [[,]]

a fixed nozzle (121) located at the lower end (120) of the burner (B);

a bell cover (400) coaxial to an axis of diffusion of the flame, the bell cover (400) being rotatably mounted to the fixed nozzle (121) such that the bell cover (400) is rotatable around a vertical axis of the burner (B); and

wherein actuating a control rod (300) ~~the cone (200)~~ deploys or retracts the movable diffusion cone (200) so that the diameter of the base of the movable diffusion cone (200) changes during the operating of the burner (B) according to the usage of the burner (B) so that the flame takes on the deployed or retracted shape of the movable diffusion cone (200) whilst in operation ~~[[;]]~~

~~a movable diffusion cone 200 located at the lower end 120, the diffusion cone 200 having a tip 210 located at least upstream from a flame creation zone to ensure the bursting of the air and gas mix,~~

~~wherein the movement of the cone 200 permits the variation in strength of the flame.~~

17. (Cancelled).

18. (Currently Amended) The device according to claim 16, wherein the movable diffusion cone (200) further comprises a lower part (220), wherein the lower part includes a plurality of blades (221) articulated in relation to the tip so as to move from a deployed position to a retracted position and vice versa.

19. (Currently Amended) The device according to claim 16, wherein the ~~opening and closing of the cone (200) as well as its relative displacement in relation to the body (100) of the burner (B) are actuated by the relative controlled displacements of at least one control rod (300)~~ control rod (300) extends along the main body (100) and into an approximate center of the tip (210) of the moveable diffusion cone (200), the control rod (300) having a spacer (330) in contact with the movable diffusion cone (200).

20. (Currently Amended) The device according to claim 19, ~~further comprising a spacer (330) located on the inside of the cone (200) and constantly touching at least one of a plurality of blades (221), wherein the spacer is connected to said control rod (300) whose actuation ensures the displacement of said spacer (330) and the deployment or retraction of said blades (221)~~ wherein the control rod (300) includes a first rod (300a) displaceable along a longitudinal axis of the main body (100) for displacing the movable diffusion cone (200) and a second rod (300b) rotatably mounted to the first rod (300a) for displacing the spacer (330).

21. (Cancelled)

22. (Previously Presented) The device according to claim 18, wherein the blades (221) overlap, one blade over the other irrespective of their position.

23. (Currently Amended) The device according to claim 16, wherein the movable diffusion cone (200) co-operates with ~~[[a]]~~ the fixed nozzle tip (121) ~~located at the lower end (120) of the burner (B).~~

24. (Currently Amended) The device according to claim 16, ~~of the type used for thermal weed killing, further comprising a bell cover (400) coaxial to [[the]]~~ an axis of diffusion of the flames,

wherein the bell cover (400) is constituted by an external cylindrical surface (410) with the purpose of maintaining a safety perimeter around the burner (B) and by a horizontal surface (420) to maintain the hot air above the contact point of the ground with the flames.

25. (Cancelled)

26. (Previously Presented) The device according to claim 16 of the type used for thermal weed killing, wherein the burner (B) is associated to at least one wheel (600) by means of an arm (610) itself swiveling at least around the vertical axis defined by the burner (B).

27. (Previously Presented) The device according to claim 16 of the type used for thermal weed killing, wherein the burner (B) further comprises a protector (700) located at the lower end.

28. (Previously Presented) The device according to claim 23, wherein the fixed nozzle tip (121) and the diffusion cone take a different conical shape or a different slope.

29. (Previously Presented) The device according to claim 23, wherein the upper end (110) of the body (100) of the burner (B) is constituted by an at least partially spherical member (112) which comprises openings to allow at least the injection of gas and the intake of air.

30. (Cancelled)

31. (Currently Amended) A gas weed killing burner device, ~~type combustion device which projects a mix of air and gas inflamed at the outlet of a pipe,~~ the burner comprising:

a main body (100) having ~~÷1~~ an upper end (110) fitted with a gas inlet ~~in the form of a~~ coupling (111) and ~~[[2]]~~ a lower end (120) which opens out to allow an inflamed gas and air mix to escape to create a flame;

a movable diffusion cone (200) located at the lower end (120), the movable diffusion cone (200) having a tip (210) located at least upstream from a flame creation zone to ensure the bursting of the air and gas mix ~~[[,]]~~ ;

a fixed nozzle (121) located at the lower end (120) of the burner (B);

a bell cover (400) coaxial to an axis of diffusion of the flame, the bell cover (400) being rotatably mounted to the fixed nozzle (121) such that the bell cover (400) is rotatable around a vertical axis of the burner (B); and

wherein ~~[[the]]~~ movement of the movable diffusion cone (200) permits the variation in strength of the flame ~~÷and~~

~~wherein the burner is associated to at least one wheel (600) by means of an arm (610) itself swiveling at least around the vertical axis defined by the burner.~~

32. (Cancelled)

33. (Currently Amended) A gas weed killing burner device, ~~type combustion device which projects a mix of air and gas inflamed at the outlet of a pipe, the burner~~ comprising:

a main body (100) having ~~÷1~~ an upper end (110) fitted with a gas inlet ~~in the form of a~~ coupling (111) and ~~[[2]]~~ a lower end (120) which opens out to allow an inflamed gas and air mix to escape to create a flame;

a movable diffusion cone (200) located at the lower end (120), the movable diffusion cone (200) having a tip (210) located at least upstream from a flame creation zone to ensure the bursting of the air and gas mix,

a bell cover (400) coaxial to the axis of diffusion of the flames, wherein the bell cover (400) is rotatably mounted such that the bell cover (400) is rotatable around a vertical axis of the main body ~~wherein the bell cover is constituted by an external cylindrical surface (410) with the purpose of maintaining a safety perimeter around the burner (B) and by a horizontal surface (420) to maintain the hot air above the contact point of the ground with the flames; and~~

~~wherein the movement of the cone 200 permits the variation in strength of the flame;~~
~~wherein said bell cover (400) is rotary mounted in a moveable manner in relation to the~~
~~body (100) of the burner (B) along the vertical axis of the burner (B)~~
wherein the bell cover (400) is configured to rotate when it brushes against the stem of
a plant while weeds are being killed by the flames exiting the movable diffusion cone (200).

34. (New) The device according to claim 31, further comprising a wheel (600) located outside a perimeter of the movable diffusion cone (200) and coupled to the main body (100) with an arm (610) that can swivel around a vertical axis defined by the main body (100);
wherein the wheel (600) supports the main body (100) above weeds to be killed by the flames exiting the movable diffusion cone (200)